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ABSTRACT

An electrochemical planarization apparatus for planarizing a metallized surface on a workpiece includes a polishing pad and a platen. The platen is formed of conductive material, is disposed proximate to the polishing pad and is configured to have a negative charge during at least a portion of a planarization process. At least one electrical conductor is positioned within the platen. The electrical conductor has a first end connected to a power source. A workpiece carrier is configured to carry a workpiece and press the workpiece against the polishing pad. The power source applies a positive charge to the workpiece via the electrical conductor so that an electric potential difference between the metallized surface of the workpiece and the platen is created to remove at least a portion of the metallized surface from the workpiece.